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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,142	09/25/2003	Roger Graham Byford	VOCO / 08	4551

26875 7590 04/03/2007  
WOOD, HERRON & EVANS, LLP  
2700 CAREW TOWER  
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CINCINNATI, OH 45202

EXAMINER
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ARMSTRONG, ANGELA A

ART UNIT	PAPER NUMBER
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2626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/671,142		BYFORD, ROGER GRAHAM	
	<b>Examiner</b>		<b>Art Unit</b>	
	Angela A. Armstrong		2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Burnett et al (US Patent Application Publication 2003/0228023 A1).

Regarding claim 1, Burnett discloses an apparatus for detecting user speech (Abstract) comprising: a first microphone (19) and at least a second microphone (13) each operable to generate sound signals with respective signal characteristics (paragraphs 39 and 46); the first microphone operable to capture a greater proportion of speech sounds of a user than the second microphone (paragraphs 39 and 46); processing circuitry operable to process the signal characteristics of the sound signals generated by the first microphone and the second microphone to determine variations in those signal characteristics for determining if the user is speaking (paragraphs 43, 51, 88; element 106).

Regarding claim 2, Burnett discloses processing circuitry operable to process the first microphone sound signals (paragraphs 43; 54-86).

Regarding claim 3, Burnett discloses speech recognition circuitry operably coupled with the first microphone for selectively recognizing speech sounds detected by the first microphone (paragraph 40).

Regarding claim 4, Burnett discloses the first microphone is located relative to the second microphone to capture a greater proportion of speech sounds of a user (paragraphs 54-86).

Regarding claim 5, Burnett discloses a headset (paragraphs 49,50) to be worn by a user and housing the first and second microphones (paragraphs 163,165).

Regarding claim 6, Burnett discloses the first microphone is positioned in the headset to be closer to a mouth of the user than the second microphone when the headset is worn (paragraphs 54-86).

Regarding claim 7, Burnett discloses the signal characteristics processed are sound signal levels (paragraphs 43, 51, 88).

Regarding claim 8, Burnett discloses the signal characteristics include at least one of energy level characteristics, frequency characteristics, amplitude characteristics and phase characteristics (paragraphs 39, 43, 54-86).

Regarding claim 9, Burnett discloses processing circuitry operable for initially determining a variation between signal characteristics of the first and second sound signals when the user is not speaking and then using that variation as a baseline (paragraphs 43, 51, 88; element 106).

Regarding claim 10, Burnett disclose the processing circuitry is operable for determining if the signal characteristics variation exceeds the baseline variation by a predetermined amount to determine if the user is speaking (paragraphs 43, 51, 88; element 106).

Regarding claim 11, Burnett discloses the second microphone is an omni directional microphone (paragraphs 43, 51, 88).

Regarding claim 12, Burnett discloses Mel scale filters, the processing circuitry operable to use outputs of the Mel scale filters for determining variations in the signal characteristics (paragraphs 39, 43, 51, 88).

Regarding claim 13, Burnett discloses circuitry for measuring energy levels of sound signals from the first and second microphones, the processing circuitry operable to use the measured energy levels for determining variations in the sound signal levels (paragraphs 39, 43, 51, 88).

Regarding claims 14-60; claims 14-60 are similar in scope and content to claims 1-13 and are rejected under similar rationale.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

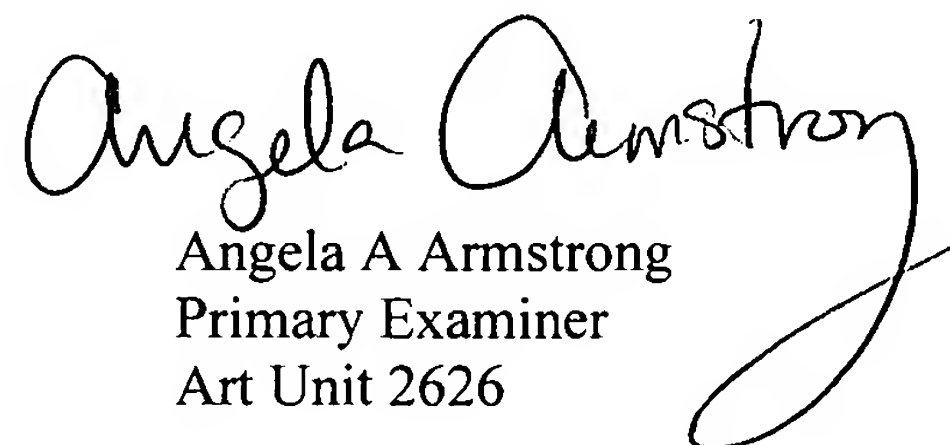
Nagayasu et al (US Patent Application Publication Number 2003/0118197 A1).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
March 30, 2007